

- 2 -

IN THE CLAIMS

Amended claims follow:

1. (Currently Amended) A method used in a computer system for creating from operational data an historical data warehouse containing subject-oriented data, comprising:
 - a) obtaining operational data from a source system;
 - b) pre-processing said obtained operational data by a stepwise operation, wherein only the last operated upon data is recorded such that data recording is avoided during data addition for efficiency purposes;
 - c) transforming said pre-processed data into subject-oriented data by utilizing reusable primary keys and Relational Database Management System dates in an operating system of the source system to link related pre-processed data; and
 - d) storing said subject-oriented data in the historical data warehouse;wherein said dates within said Relational Database Management System in said operating system of said source system are obtained by trigger or log-scraping of said Relational Database Management System;
wherein said pre-processing includes an insert function that returns a warning when associated subject-oriented data already exists in said historical data warehouse;
wherein said Relational Database Management System dates are utilized for distinctly characterizing said subject-oriented data when a plurality of tables containing operational data with duplicate primary keys are combined in said historical data warehouse;
wherein said subject-oriented data is stored in said historical data warehouse with an associated creation date and deletion date derived from said Relational Database Management System dates.

- 3 -

2. (Currently Amended) A method used in a computer system for creating from operational data records an historical data warehouse containing related subject-oriented data records, comprising:

- a) obtaining operational data records from a source system;
- b) pre-processing said obtained operational data records to generate pre-processed data records, wherein said pre-processing comprises operating on each operational data record in a serial manner, adding new data to an immediately prior operated-on record with an entry being recorded only for the last serially operated-on record such that data recording is avoided during data addition for efficiency purposes;
- c) transforming said pre-processed data records into related subject-oriented data records, wherein said transforming comprises linking related pre-processed data records together by means of reusable primary keys on said source system and dates within a Relational Database Management System in an operating system of said source system; and
- d) storing said related subject-oriented data records in the historical data warehouse;

wherein said dates within said Relational Database Management System in said operating system of said source system are obtained by trigger or log-scraping of said Relational Database Management System;

wherein said pre-processing includes an insert function that returns a warning when associated subject-oriented data already exists in said historical data warehouse;

wherein said dates within said Relational Database Management System are utilized for distinctly characterizing said subject-oriented data when a plurality of tables containing operational data with duplicate primary keys are combined in said historical data warehouse;

wherein said subject-oriented data is stored in said historical data warehouse with an associated creation date and deletion date derived from said dates within said Relational Database Management System.

3. (Cancelled)

- 4 -

4. (Original) A method according to Claim 1, further comprising the step of accessing the historical data warehouse by standard viewing means.
5. (Currently Amended) A method used in a computer system for creating from operational data records an historical data warehouse containing related subject-oriented data records, comprising:
- a) obtaining operational data records from a legacy source system;
 - b) pre-processing said obtained operational data records to generate pre-processed data records, wherein said pre-processing comprises operating on each operational data record in a stepwise manner, adding new data to an immediately prior operated-on record with an entry being recorded only for the record having the last stepwise operation such that data recording is avoided during data addition for efficiency purposes;
 - c) transforming said pre-processed data records into related subject-oriented data records, wherein said transforming comprises linking related pre-processed data records together by means of reusable primary keys on said source system and dates obtained by trigger or log-scraping a Relational Database Management System in an operating system of said legacy source system; and
 - d) storing said related subject-oriented data records in the historical data warehouse wherein said pre-processing includes an insert function that returns a warning when associated subject-oriented data already exists in said historical data warehouse;
wherein said dates are utilized for distinctly characterizing said subject-oriented data when a plurality of tables containing operational data with duplicate primary keys are combined in said historical data warehouse;
wherein said subject-oriented data is stored in said historical data warehouse with an associated creation date and deletion date derived from said dates.
6. (Original) A method according to Claim 5, further comprising the step of accessing the historical data warehouse by standard viewing means.

- 5 -

7. (Currently Amended) A computer program embodied on a computer readable medium that generates from operational data from a source system an historical data warehouse containing subject-oriented data, comprising:

- a) a preprocessing module, wherein said preprocessing module obtained said operational data by a stepwise operation, wherein only the last operated upon data is recorded such that data recording is avoided during data addition for efficiency purposes and
- b) a transforming module, wherein said transforming module transform said preprocessed data into subject-oriented data by utilizing reusable primary keys on the source system and Relational Database Management System dates in an operating system of the source system to link related preprocessed data;

wherein said dates within said Relational Database Management System in said operating system of said source system are obtained by trigger or log-scraping of said Relational Database Management System;

wherein said pre-processing module performs an insert function that returns a warning when associated subject-oriented data already exists in said historical data warehouse;

wherein said Relational Database Management System dates are utilized for distinctly characterizing said subject-oriented data when a plurality of tables containing operational data with duplicate primary keys are combined in said historical data warehouse;

wherein said subject-oriented data is stored in said historical data warehouse with an associated creation date and deletion date derived from said Relational Database Management System dates.

8. (Original) A computer program according to Claim 7, further comprising a storage module for storing said subject-oriented data in an easily accessible format.

9. (Currently Amended) A computer system used to create from operational data records an historical data warehouse containing related subject-oriented data records, comprising:

- 6 -

- a) means for obtaining operational data records from a source computer system;
- b) pre-processing means for pre-processing said obtained operational data records to generate pre-processed data records, wherein said pre-processing means operates on each operational data record in a serial manner, adding new data to an immediately prior operated-on record with an entry being recorded only for the last serially operated-on record such that data recording is avoided during data addition for efficiency purposes;
- c) transforming means for transforming said pre-processed data records into related subject-oriented data records, wherein said transforming means links related pre-processed data records together by means of reusable primary keys on said source computer system and dates within a Relational Database Management System in an operating system of said source computer system; and
- d) storage means for storing said related subject-oriented data records in the historical data warehouse;

wherein said dates within said Relational Database Management System in said operating system of said source system are obtained by trigger or log-scraping of said Relational Database Management System;

wherein said pre-processing includes an insert function that returns a warning when associated subject-oriented data already exists in said historical data warehouse;

wherein said dates within said Relational Database Management System are utilized for distinctly characterizing said subject-oriented data when a plurality of tables containing operational data with duplicate primary keys are combined in said historical data warehouse;

wherein said subject-oriented data is stored in said historical data warehouse with an associated creation date and deletion date derived from said dates within said Relational Database Management System.

10. (Original) A computer system according to Claim 9, further comprising means for accessing the historical data warehouse by standard viewing means.

11. (Cancelled)

- 7 -

12. (Previously Presented) A method according to Claim 1, wherein said historical data warehouse includes a standard set of core reports, components and metadata.
13. (Currently Amended) A method according to Claim 1, wherein said pre-processing includes at least one of an ignore function, an ~~insert function~~, an update function, and a replicate function.
14. (Previously Presented) A method according to Claim 13, wherein said replicate function includes a delete function.
15. (Previously Presented) A method according to Claim 13, wherein said pre-processing associated with said update function returns an error when associated subject-oriented data does not exist in said historical data warehouse.
16. (Cancelled)
17. (Previously Presented) A method according to Claim 1, wherein said stepwise operation includes performing a function on immediately previous data that is not original data.
18. (Previously Presented) A method according to Claim 1, wherein said related pre-processed data has different descriptions recorded over time.
19. (Previously Presented) A method according to Claim 1, wherein said Relational Database Management System dates are utilized for placing said related pre-processed data of the subject-oriented data in a temporal order.
20. (Cancelled)
21. (Cancelled)